

Claims

1. Circuit arrangement for a multimode mobile telephone for transmitting/receiving signals to/from various mobile radio networks with:

5 - a baseband (1), in which at least two analog-digital converters (6.1 to 6.3) and one digital-analog converter (7) are arranged, and

10 - a transceiver unit (2), in which at least a first receiver (3.1) and a second receiver (3.2) and at least one transmitter amplifier (4) are arranged, with both connections (11.1, 11.2) being provided between the outputs (17.1, 17.2) of the receivers (3.1, 3.2) and the analog-digital converters (6.1, 6.2), and a connection (12) being provided between the input (18) of the

15 transmitter amplifier (4) and the digital-analog converter (7), and also

connections (13.1, 13.2, 13.2' and 14) being present between the inputs (19.1, 19.2) of the first, and of the second receiver (3.1, 3.2), the output (20) of the transmitter amplifier (4) and an antenna changeover switch (10), the antenna changeover switch (10) being connected to a transmitting and receiving antenna (8), and furthermore

20 - means (5) being provided to perform a digital adaptive predistortion,

25 characterized in that

at least one switching element (9) is arranged in such a way between the output (20) of the transmitter amplifier (4), of which there is at least one, and the input (19.2) of the second receiver (3.2) that an optional connection (16') is created

30 which connects the output (20) of the transmitter amplifier (4), of which there is at least one, to the input (19.2) of the second receiver (3.2) and at the same time disconnects the connection (13.2') between the input (19.2) of said second receiver (3.2) and the antenna changeover switch (10).

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2. Circuit arrangement in accordance with the preceding Claim 1,

characterized in that
at least one switching element (9) is arranged in the antenna
changeover switch (10).

5 3. Circuit arrangement in accordance with one of the preceding
Claims 1 and 2,
characterized in that
the first receiver (3.1), of which there is at least one, is
designed in such a way that it is suitable for the reception of
10 signals from the UMTS network.

4. Circuit arrangement in accordance with one of the preceding
Claims 1 to 3,
characterized in that
the second receiver (3.2), of which there is at least one, is
designed in such a way that it is suitable for the reception of
15 signals from the GSM network.

Abstract

5 Circuit arrangement for a multimode mobile telephone for transmitting/receiving signals to/from various mobile radio networks.

The invention relates to a circuit arrangement for a multimode mobile telephone for transmitting/receiving signals to/from various mobile radio networks with: a baseband (1), in which at least two 10 analog-digital converters (6.1 to 6.3) and one digital-analog converter (7) are arranged, and a transceiver unit (2), in which at least a first receiver (3.1) and a second receiver (3.2) and at least one transmitter amplifier (4) are arranged, and furthermore means (5) for performing digital adaptive predistortion.

15 The invention is characterized in that at least one switching element (9) is arranged in such a way between the output (20) of the transmitter amplifier (4), of which there is at least one, and the input (19.2) of the second receiver (3.2), that optionally a 20 connection (16') is created that connects the output (20) of the transmitter amplifier (4), of which there is at least one, to the input (19.2) of the second receiver (3.2) and at the same time disconnects the connection (13.2') between the input (19.2) of this second receiver (3.2) and the antenna changeover switch (10).

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Figure 2